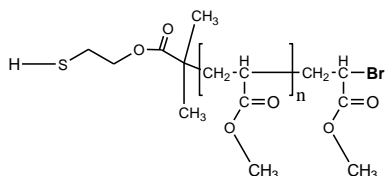


Sample Name:  
**Poly (methyl acrylate),  $\alpha$ -thiol-terminated**

Sample # **P16380-MASH**

**Structure:**

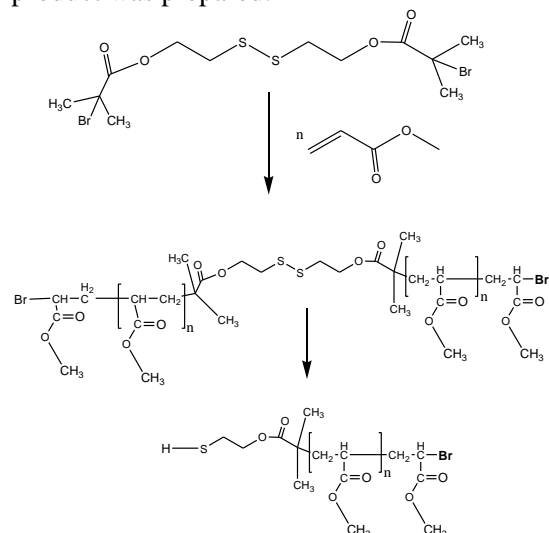


**Composition:**

Mn x 10 <sup>3</sup>	1.2
PDI	1.3
Functionality	~90%

**Synthesis procedure:**

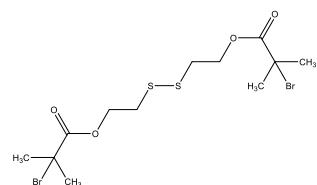
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



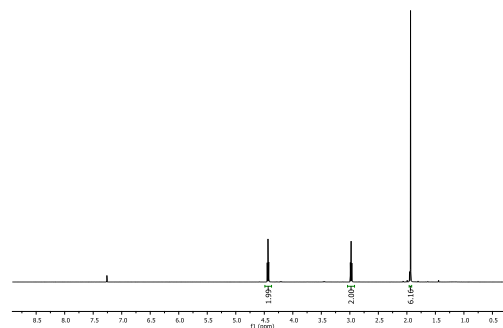
**Characterization:**

The polydispersity was characterized by size exclusion chromatography (SEC) and molecular weight was calculated from <sup>1</sup>H NMR. The functionality was confirmed by disappearance of methylene proton adjacent to disulfide bond at 2.9 ppm and appearance of thiol proton at 2.7 ppm.

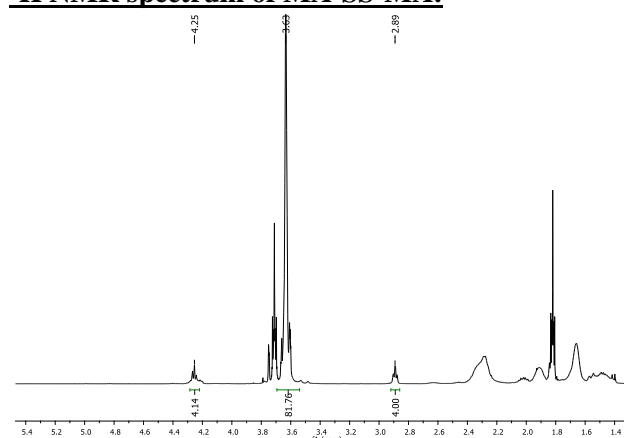
**Structure of ATRP initiator:**



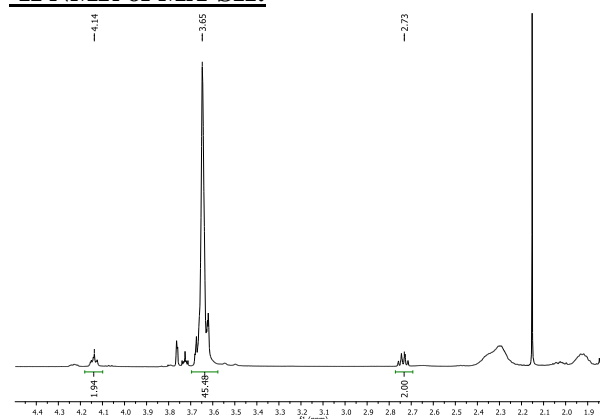
**<sup>1</sup>H NMR of ATRP initiator:**



**<sup>1</sup>H NMR spectrum of MA-SS-MA:**



**<sup>1</sup>H NMR of MA-SH:**



**SEC elugram of MA-SS-MA and MA-SH:**

